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AROUND THE LAKES.

CLEVELAND.

Tug Selah Chamberlain occupied Globe Drydock yesterday for a through recalking. Schooners Queen City and C. H. Johnson will each receive quite extensive repairs during the winter.

The harbor tug Castle has been hauled out at Mr. Radcliff's shipyard, where she will be repaired at a cost of about \$1,000.

The Marblehead crew give a dance at the hall in Marblehead on the 22d inst, to which the Cleveland crew have been invited.

The iron propeller William Chisholm will have some changes made in her bulkheads at the Globe Shipyard in order to give additional facilities to the handling of grain cargoes.

Captain A. Bradley's will, which has been probated bequeaths to each of his children \$80,000 and generous provisions have been made for his wife and other relatives in addition to a gift of \$10,000 to the Woman's Christian Mission. M. A. Bradley, George H. Warrington, Henry Beckman and George Stone are executors.

The Globe Iron Works will build the engines for both the steamers under construction by Quayle's Sons, the dimensions of which have been heretofore given. In addition to this the Globe is compounding three other engines and as fast as the marine engineers arrive home they are put at work by that firm in addition to the regular force.

Contract has been placed with Quayle's Sons by Captain Thomas Wilson for a steam-barge to be 260 feet over all and built after the model of the Kasota. The steamers under construction at Quayle's Sons yards, the other being for Moore & Bartow and others, will give employment to quite an army of men and give that firm quite a boom this winter.

A certificate given by Captain C. C. Goodwin testifies that Captain W. D. Andrews passed a first class examination in the international code of signals, restoring the apparently drowned, and the handling of the Lysle gun, which includes the use of the life car and breeches buoy; for the rescue of ship wrecked persons from stranded vessels, and that he possesses thorough practical knowledge of every branch of the United States life saving service, which qualifies him for any position in the life saving service. Mr. Andrews left for his home in Canada yesterday.

The wreck report and vessels laid up will be contained in the next issue of the MARINE RECORD and we trust all our writers will get the names of vessels at their ports before us as early as possible. Persons not subscribers when ordering sample copies of the RECORD should bear in mind that the issue containing this report will not be sent them, as the copy of the RECORD with the wreck report, etc., is worth the price of six months subscription \$1.00. This decision is brought about by the fact it has been the custom heretofore for two to three hundred persons to ask for sample copies of the RECORD when this report is published. See?

The dance of the life savers of Cleveland Tuesday evening was much superior to anything they have ever held here in point of numbers and general enjoyment. The dance was honored by the presence of the Marblehead life savers, Captain L. M. Clemons, and we do not hesitate to say that a finer looking crew never pulled a life boat to the rescue of the shipwrecked mariner, all being "tall men and good," and the little captain as the boys call him, has a U. S. life saving medal of the first class which weighs 11½ ounces gold, as have two other members of the crew, engraved with a beautiful design of a life boat surrounded by high running waves.

The old Floating Bethel which has swung at its moorings in the river at the foot of St. Clair street for the past seven years, and

which has been a place of comfort and recreation to many a poor sailor, is soon to be abandoned for more commodious quarters. The committee, Captain Thomas Wilson, Captain George Stone Rev. J. D. Jones, having the matter of new quarters in charge met Monday and decided to buy the brick building, No. 165 River street, which had been offered them and which is situated a few doors north of St. Clair and extends back to the river. The building cost the association \$5,500 and more than half of the sum has been subscribed.

BUFFALO.

Special to the Marine Record.

Dec. 16.—This is a week of inactivity. The lake traffic is cut off. All interested parties in the lake marine are closing up their books, and it is generally conceded that the credit is small compared with the amount of capital employed; still there are some who say that there is a little left, over and above expenses. All these assertions are to be taken for what they are worth. The true state of affairs is not always made public; neither should it be. Fatal results might follow financially. Confidence is one of our great principles, and charity for our fellow laborers is a principle handed down to us from an ancient date.

We are in possession of very little news that would interest the readers of the MARINE RECORD. During the week we have had dispatches, recording the stranding of the propeller Oconto, with the loss of some lives; also reports from schooner Maxwell, crew saved. The former went ashore on one of the Charity Islands, Lake Huron. The latter a few miles south of Goderich, Canada, same lake. Both have been reported in a precarious position, but the latter, it is said, with a few days favorable weather, may be released and taken into a port of safety. The former there is some doubt about. She may remain in her present condition during the winter, if she holds together. Her "ripe age is against her."

The boats that thought to brave the elements, and run without regard to insurance as long as they dare to, have been obliged to succumb and take shelter in a haven of security with their cargoes.

The contract by the Anchor line agents for a new iron steamboat, with the Union Drydock Company, has been let and the plate contracted for. WM.

CLAYTON.

Special to the Marine Record.

Captain Will O'Toole, Captain Will Brooder & Albest Brooker. Engineers have arrived home for the winter.

Mr. Ellis Davis of steam-barge Alcona arrived last week.

Captain Geo. Sweet will during the latter part of the spring put a good lot of repairs on the steamer John Thorn and J. F. Maynard which will come out in fine shape for the summer travel.

The following engineers are in town Albert Brooker of steam-barge Escanaba, Walter Allen steamer Anna Laura, Jasper Ellis steam yacht Van Horne, Melzar Allen, John Steel and Riley Allen.

The steamer Deseronto will run till the ice closes the river between Clayton and Gananoque. B.

LUDINGTON.

Special to the Marine Record.

Steamer No 2, F. & P. M. Railroad, arrived from Milwaukee, with a full load of flour. Encountered heavy snow storm all the way across. Pere Marquette Lake is frozen up.

Steam-barge Starke is here for a load of lumber for Milwaukee, but is unable to break the ice up to Carter's mill where she is to load.

Scow C. L. Fick is waiting for an opportunity to go to Port Washington, Wis., with lumber, and the schooner Challenge waits weather bound to Milwaukee.

Schooner Simpson here also, will probably tow to Manistee and lay up. Wind northeast and heavy snow. D.

CHICAGO.

Special to the Marine Record.

The owners of the schooner Orphan Boy have concluded to institute a search. Their tug has been ordered to leave St. Ignace and cruise among the islands. If the Orphan Boy is found in the harbor she will be taken in tow. If on the shore her crew will be saved and she will be allowed to remain wherever she is until spring.

Schooner Melvina has arrived after tedious passage from Traverse bay. The vessel was not badly used, but it is evident she has not experienced much pleasant weather. Her captain said he did not see anything of the Orphan Boy as he passed through the south passage and around the head of the Manitowish. She might be ashore any place around the islands and even on the main land and no one would see her. Fishermen have not ventured on the lake for weeks and will not, so there has been no news from the islands whatever.

The tug James McGordon will have a rebuild and new legs on her boiler at Green Bay City this winter. The schooner Maggie Dall, Captain Alex Gibson, with 2,000,000 shingles arrived at 7 a. m. on the 10th having left Muskegon at 3 a. m. on the 9th. She encountered heavy weather but did not lose a shingle.

Captain Geo. Blain arrived here from Milwaukee Saturday he laid up the Anchor line propeller Gordon Campbell and schooner Schuykill at Milwaukee and has taken charge of the Anchor line propeller Lehigh, Conemaugh Clarion and Annie Young and the schooner Allegheny laid up at this port.

The eleventh annual ball of the Marine Engineers Beneficial Association No. 4, will take place at Brand's Hall, cor. Clark and Erie street, Chicago, Wednesday evening, December 30th, 1885, everything will be done by the officers and committee to make it a great success.

Considerable anxiety is felt at this port in consequence of the non-arrival of the schooner Orphan Boy, Captain Holliday. No tidings has been heard of her since the afternoon of the 4th of December when she was seen off Point Waukegan. The tug Saugatuck owned by the Mackinaw lumber company, who are also owners of the Orphan Boy, received orders to leave St. Ignace on Monday and cruise among the islands in search of the missing schooner. We sincerely hope their efforts will be crowned with success.

The Dunham Wrecking and Towing Company's tender of \$174 per month to do the work at the crib during the winter months has been accepted.

Captain T. Willford and Engineer Quincy Miller, of the steamship J. H. Devereux, left this port for their homes at Cleveland on the 12th after having put the Devereux in winter quarters. This fine new steamship had a very successful season, making 9½ round trips between the 23d of May and the 26th of November, carrying 19 loads, averaging 2,300 tons per load, and not meeting with an accident of any kind.

Captains Tom Richardson and John Wright, of Milwaukee, were in the city on the 9th and left for New York, en route for England to visit their friends.

Captain Thomas Hansen, of the schooner W. O. Goodman, says the tug Charles Williams, of the Canfield tug line, is the boss at towing, she having towed the Goodman over the bar at Manistee on her last trip, when she was drawing one foot more water than there was on the bar, without stopping.

The tug Jesse Spaulding, Captain Cox, towed the schooner Mediator from Sturgeon Bay, arriving at this port on the afternoon of December 10th. She left this port for Sturgeon Bay on the 11th.

The propeller Lawrence, of the Northern Michigan line, left this port Saturday night for Manitowoc, where she will get a thorough rebuild this winter.

The V. O. T. tug Union struck a snag in B. slip, Mud lake, Saturday, when transferring the schooner Homer to her winter dock. The tug knocked a hole in her star-board side, near the bow, about one foot under water, which necessitated her going into one of Miller Brothers' docks for repairs. She will also receive a general overhauling and ironing.

The V. O. T. Company will have the tugs Satisfaction, Union and Carpenter in commission all the winter.

The schooners Lizzie A. Law, C. P. Minch and Thomas L. Parker have been loaded with flaxseed, and the schooners D. E. Bailey and Polynesia are loading.

The Dunham Towing Company will keep their tugs T. T. Morford and Mosher in commission this winter.

Chicago Drydock Company. The schooner Mediator is in for new frames aft, new stern post and transom and a new rudder and recalking; the steam canal boat Old Rocks was in for calking; the tug Viva for calking and a new stem; the steam-barge Rhoda Emily for a general overhauling; schooner Hattie Butt will have her foremast cut down and will get a new main and mizzen mast and converted into a three and after.

The schooner Mercury, Captain Louis Sterling, left this port for Milwaukee Saturday in tow of the tug J. J. Hagerman. The Mercury will go into winter quarters at the latter port.

At Miller Brothers Drydock the schooner Nelson Bloom is in for calking; one of the Chicago Dredging & Dock Company's scows was in for calking; the tug Union for repairs; the tug Calumet for a new wheel; the schooner D. E. Bailey got some new floor, ceiling, hatch-combings and hatches; the schooner A. Mosher some repairs; the barge S. H. Rutter received a new main-mast; the schooner Windsor will have a new main mast and bowsprit.

The schooner L. Van Valkenburg has been laid up at St. Joseph.

The following vessels have arrived at Chicago since my letter of the 9th:

December 9, schooners W. O. Goodman, Manistee, lumber; G. W. Naughtin, Manistee, lumber.

December 10, schooners Margaret Dall, Muskegon, lumber; Barbarian, Pine Lake, pig iron; propellers Thos. W. Palmer, Milwaukee, light; Rhoda Emily, Alpena, lumber; tug Jesse Spaulding, Sturgeon Bay, towing; schooner Mediator, Menominee, lumber; propellers R. A. Packer, Buffalo, coal; B. W. Blanchard, Buffalo, sundries; schooner City of Sheboygan, Cheboygan, lumber.

December 11, propellers De Pere, Manitowoc, sundries; Charles Reitz, Manistee, sundries; Lawrence, Cheboygan, sundries; tug T. T. Morford, Grand Haven, light; propeller City of New York, Muskegon, light; schooner Otter, Manistee, lumber; propeller Saginaw Valley, Manistee, salt.

December 12, tug J. J. Hagerman, Milwaukee, light.

December 14, schooners L. B. Shepherd, Muskegon, wood; Bay State, Muskegon, lumber; E. M. Stanton, Grand Haven, wood; Melvina, Charlevoix, pig iron.

December 15, Eagle Wing, Charlevoix, lumber; M. A. Gregory, Manistee, fish; propeller A. Booth, Manistee, fish.

Captain William Johnson's fleet, comprising the schooners W. O. Goodman, Olga, Alice, Clara, and A. J. Covell are all in winter quarters at this port. None of them have met with accident of any kind during the season. They have done as well as any others, but their profits, through the lowness of freights, have been small. Captain Johnson's vessels all rate A1, and comprise one of the best fleets of lumber schooners on the lakes, and his captains are all good, careful men and excellent navigators.

WILLIAMS.

MARITIME LAW.

ADMIRALTY APPEAL—SALVAGE—FIRE IN CARGO OF COTTON—PERSONS UNDER LEGAL DUTY TO PERFORM SALVAGE.

U. S. Circuit Court, Southern District of New York.

Wallace, J.

Upon the circumstances in this case it should be held that the salvage service for which this suit was brought will be fairly compensated by a very moderate award. The lighter Baker, a scow with motive power, was discharging her cargo, consisting of bales of cotton, on the dock of the Cunard Steamship Company when a fire broke out in her cargo. She lay in a slip crowded with other vessels with the steamship Servia at her port side and another lighter also loaded with cotton alongside and made fast to her starboard side. The fire occurred about noon. Appliances were at hand for extinguishing the fire and were immediately brought to bear. The dock was equipped with a stationary engine capable of throwing 850 gallons of water in a minute in several streams from 1,300 feet of hose, besides five hydrants for Croton water with necessary hose and three Aetna fire extinguishers, and three dozen hand grenades. There were also appliances for signalling the fire department, and the signal had been given before the libelants appeared upon the scene. The steamship Servia was equipped with a pump and ample hose for extinguishing fires. As soon as the fire was noticed, the stationary engine on the dock was started and two streams of water were put upon the lighter, and two other streams of water were likewise brought upon her from the Servia's apparatus. Although the fire was measurably controlled by these appliances, it was not subdued, and the Superintendent of the dock fearing doubtless that the fire would be communicated to the other vessels in the slip, halted the tug Lyndhurst, then lying near by, with directions to remove the lighter from the slip. The libelants are the owners, master and crew of the Lyndhurst. The tug immediately hauled the lighter out into the river and held her there for a few minutes, playing upon her in the meantime a stream of water from her deck hose, until the city fire boats, the Zopher Mills and the Havemeyer arrived. As soon as the fire boats arrived they went alongside the lighter and emptied upon her ten or more streams of water, while the Lyndhurst towed her to 57th street, at which place her cargo was removed. A cotton fire can be smothered, but will remain in a smouldering condition until the bales are removed and treated separately. It was necessary therefore, to take the lighter to 57th street. The value of the cotton saved was \$29,000; the lighter was worth about \$3,000.

It is quite clear that the fire had not been satisfactorily subdued at the time the libelants were called upon to remove her from the slip, but was burning so vigorously as to excite the apprehension of spectators for the safety of the surrounding shipping. The master of the lighter was absent at dinner, and the only hand on board assisted the crew of the tug in their efforts to remove the lighter from the slip. It was a prudent and necessary act in view of the danger to the other vessels in the slip to remove the lighter as speedily as possible. It may be doubted however, whether the lighter and her cargo were much benefited by the service beyond the towage, which was necessary in order to effect this removal to a suitable place for the special treatment of the cargo. In the interval which elapsed before the arrival of the boats of the fire department, the lighter was beyond the range of the fire apparatus by which she was protected measurably while in the slip, and no protection was afforded to the lighter and her cargo except by the inadequate appliances of the tug. During this interval the fire doubtless increased and the cargo sustained a corresponding injury. When the boats of the fire department did arrive, however, they were enabled to act more expeditiously and advantageously than they could have done if the lighter had remained in the slip surrounded by other vessels and comparatively inaccessible. So also, while the lighter was being towed to 57th street, during a period of two hours the men on the boats of the fire department, instead of being occupied partly in towing her, were able to give more exclusive attention to the work of extinguishing the fire. For these reasons, it is probably fair to assume that the ultimate loss to the cargo was less than it would have been, if the lighter had not been assisted by the Lyndhurst.

Although compensation for salvage services does not inure to persons who are under a legal duty to perform them, and none, therefore, can be claimed by the

officers and employees of the fire department; nevertheless the value of the services rendered by those engaged in suppressing the fire before the tug was called, must be taken into account as though the reward were to be apportioned among the different salvors according to the merit of each. The diminished loss which resulted from the services of the libelants is the proper basis for their compensation so far as the value of the property saved is an element of an award for salvage. How much that is, in the present case, it is difficult to determine, but obviously the services of the libelant contributed in a comparatively insignificant degree to the total salvage.

These services were promptly and zealously rendered, but they were of short duration, and after the arrival of the fireboats were not materially different from those incident to an ordinary towage service. During the two hours occupied by the services the libelants exerted themselves faithfully; but what they did, did not involve any appreciable danger or hardship to themselves nor even any unusual responsibility, except for the few moments before the fire boats arrived. For usual towage services the tug and her crew received compensation at the rate of from \$10 to \$15 per hour. The tug was somewhat blistered by the heat and somewhat bruised by contact with the Zopher Mills, but her injuries were inconsiderable. Some of the men got more or less wet in the service.

The district court decreed for the libelants the sum of \$750. New testimony introduced upon this appeal modifies somewhat the aspect of the case as it was presented in the district court, more especially in regard to the extent of the peril to which the lighter and her cargo were exposed at the time the tug came to their assistance. Were it not for this testimony the award made by the district court would be reduced reluctantly by this if court reduced at all. The allowance of salvage is necessarily largely a matter of discretion which cannot be determined with precision by the application of exact rules. Different minds in the exercise of independent judgment upon the same evidence seldom coincide exactly in their view of the facts, or give the same prominence to the varied elements which make up the case. An approximate concurrence is all that can be expected. For this reason appellate courts are not disposed to interfere with decrees in salvage cases, merely because the sum allowed the salvors is larger than the appellate court would have allowed; and the circuit courts of the United States are influenced by this view. The *Emulous* 1 Sum, 214.

It is urged for the libelants that the decree of the district court awarded a much smaller per centage to the salvors upon the value of the property than is usually allowed according to the decisions. Courts do "to a certain and limited extent" quote the language of Dr. Lushington "take into consideration the value of the property saved in assessing salvage compensation with the view of making the general rate of compensation sufficient to induce persons to undertake salvage service, and as it were making up in cases of large value for the impossibility of giving a complete and adequate reward in cases of small values." The *Henry* 2 Eng. Law & Eq. 567. As is said by Bradley, J. in the *Sulote* 5 Fed. Rep. 99, 102: "The allowance of anything like a uniform per centage on the value saved in such cases would be attended with inequality and injustice." Neither the value of the property imperilled nor the exact quantum of service performed is a controlling consideration in determining the compensation to be made. The peril, hardship, fatigue, anxiety, and responsibility encountered by the salvors in the particular case; the skill and energy exercised by them, the gallantry; promptitude, and zeal displayed, are all to be considered and the salvors are to be allowed such a generous recompense as will encourage and stimulate similar services by others. Each case is distinguished from others by circumstances peculiar to itself, and reported adjudications seldom meet the facts of the particular case before the court. As has been said, although the value of property menaced by the fire was quite considerable, the amount of loss saved to the owners by the exertions of the libelants was small. Although it was very desirable in the interests of others whose property was more or less exposed to danger by the fire to remove the lighter immediately the risk incurred by others is not a fair element of the value of the services rendered. The salvaged property is not to be charged upon the theory or benefit to third persons. Under all the circumstances, it is considered that the libelants will be liberally recompensed by allowing them the sum of \$350, of which \$150 should go to the owner

of the tug, and the remainder to be apportioned among the master and crew. A decree is ordered accordingly, with costs, to the libelant in the district court, and without costs to either party in this court.

November 21, 1885.

CHARACTERISTICS OF MISSISSIPPI RIVER STEAMBOAT MEN.

BY THE SECOND ENGINEER.

Written for the Marine Record.

PART IV.

The engines in use upon the Mississippi river are so seldom seen any where else that the lever engine is generally known as a "western steamboat engine." The western steamboat engine uses the ordinary puppet valve, which is operated by levers, the word lever being pronounced as if spelled "lee-veer." The pump that is used to furnish water for the boilers of a western steamer is a beam engine, and is recognized only by the name of "the doctor," while all auxiliary engines are called "niggers," and the auxiliary boiler is a "nigger" boiler. A "gland" is an appendage used upon every specie of engine save the western marine engine, but there it is never seen. The gland is called the "stuffing box," while the stuffing box proper is called the "chamber." The "crank pin" is a "wrist" and all bearings are "journals," and the paddles of an ocean steamer become "buckets" on the river. The "stacks" or "funnels" grow up into "chimneys." The bow of the boat is generally the "nose."

The engines are high pressure to the fullest extent of that term, and a condensing engine does not meet with universal favor. The pilots like to hear the big engine belch loud and full when backing away from danger, for it encourages him, and he thinks everything is all right.

Now, nearly all of our steamers, particularly our side wheelers, steer badly, not from a mistake in the architectural design, but from the shallow water. Take a steamer that will steer splendidly in deep water and the instant she strikes shallow water she will dodge about, and the use of the wheels is often necessary to straighten her up. Run out of a deep bend, on to a shallow crossing, and the boat will shy away from the bar, sometimes nearly "rounding to." This is called running away. The story is told of a pilot on the Richmond—a boat with eight boilers and a pair of sixty-inch condensing engines, ten feet stroke—who was holding her up the shore, and starting in on the crossing, the boat ran away and was swinging toward the right hand shore with a rapidity that made the hair rise on the head of the pilot, for it looked as if the Richmond would kill herself, sure. The pilot pulled the stopping bell of the larboard engine, gave the pilot wheel a spin, hard down, then set the backing bell to jingling. The engineer gave the engine steam, but the boat was under such headway, which, in addition to her swinging motion, made it impossible for the engine to turn far enough to get the effect of her vacuum. The engineer saw the ponderous crank turn back to the dead center and hang there. Turning to the trumpet he yelled to the pilot:

"I have lost my vacuum, and I can't back 'er."

"Lost your vacuum," ejaculated the astonished pilot, "if you don't find your vacuum pretty d—n quick this boat will knock her brains out against the bank."

However, that is not the pilot who was running up the Missouri on a boat with six-foot stroke engines, and who changing on to one with ten-foot stroke, asked the engineer if they could not put four exhaust pipes, (or in western parlance, "scape pipes") on each engine, for he said that when the boat "took the woods," and he backed 'er, it took too long for her to "scape" to suit him, and it was hard to make him understand that the engineers were doing their duty, even though it was long between "scapes."

All steamers nowadays have bell trumpets, from engine room to pilot house, to enable the pilot to hear the bells. The law requires it, yet the first boat that ever had them was the great Republic. She had compound engines, and the pilot, not being able to hear her "scape," nor to hear her engine bells, said he never knew whether she was working or not, so trumpets were put on, and the supervising inspector from St. Louis had it made a law to have them on all steamers.

It is said that Captain James Davidson intends to build this winter at Bay City, a barge without spars, for carrying logs from Georgian bay to Bay City. She is to be 260 feet long, 50 feet wide and 12 feet deep with hatches almost the entire length of her deck. She is to have sharp bows and elliptical stern. The logs are to be handled by means of an endless chain. Her capacity is to be 2,000,000 feet. Captain Davidson is interested in the Emery lumber company which recently purchased over 160,000 acres of pine land on the shores of Georgian bay.

THE UNITED STATES TWIN-SCREW CRUISER CHICAGO.

The United States cruiser Chicago, launched last week, has probably been the subject of more discussion than any recent vessel of her class. She is the largest of the three vessels now building for our navy under the direction of the Naval Advisory Board. All improvements in the construction of hull, machinery, and guns for a modern unarmored cruising vessel have been introduced into her design, and she is undoubtedly vastly superior in offensive and defensive power.

These three ships are the first built in this country constructed entirely of steel of American manufacture. The hull is subdivided into numerous water-tight compartments with a view to combining strength and safety. A double bottom extends under the whole engine and boiler space. A thorough system of drainage pipes places every compartment in communication with powerful steam pumps and numerous hand pumps, which are capable of discharging some forty tons of water per minute. Artificial ventilation is produced by steam fans of large capacity. Electric lights are used, not only for internal illumination, but for the side lights and masthead lights; and, in addition, are lights of several thousand candle-power are provided as a safeguard against night attacks by rams and torpedo boats. These are the first vessels of our navy provided with modern steel guns. The battery consists of six-inch and eight-inch breech-loading rifles, beside a number of Hotchkiss revolving cannon and Gatling guns. Steel shields are used for the protection of the guns. A steel deck 1½ inches thick, the sides of which slope some four feet below the water line, covers the whole engine and boiler space. Additional protection is given by the arrangement of the coal bunkers, which, when filled, interpose a wall of coal from five to seven feet thick between the engines and boilers and the sides of the vessel, both above and below the steel deck. In addition to the usual boats of a vessel of war, both a steam launch and a steam cutter are provided, also two large torpedo boats, etc., armed with the most powerful torpedo now known for this special purpose.

The following are the principal dimensions of the Chicago: Length over all, 342 feet 4 inches; length between perpendiculars, 315 feet; extreme breadth, 48 feet 3 inches; depth from base line to throat of floor at mid section, 3 feet 6 inches; depth of hold, from top of floors to top of armor deck beams at center, at mid section, 16 feet 5½ inches; from top of armor deck beams to top of gun deck beams, at mid section, 7 feet 8 inches; from top of gun deck beams to top of spar deck beams, at mid section, 7 feet 6 inches; depth from base line to top of spar deck beams at center, at mid section, 34 feet 10 inches; mean draught of water, 19 feet 1 inch; displacement, 4,586 tons; area of greatest immersed transverse section, 790 square feet; coefficient of fineness, transverse section, 0.853; area of load water line, 11,310 square feet; coefficient of fineness of transverse section, 0.745; coefficient of fineness of displacement, 0.547; ratio of length to breadth, 6.534 to 1; area of immersed surface of hull and rudder, 18,955 square feet; area of plain sails, 14,880 square feet.

The vessel will be propelled by twin-screws, and it is calculated that with 5000 I. H. P. she will attain a speed of sixteen knots per hour in smooth water. It is, however, confidently expected that with the arrangements for forcing the draught of the boilers provided in the Chicago, this power can be considerably exceeded.

The boilers and engines may be regarded as distinctly American types.

Each engine with all its dependencies is placed in a separate water-tight compartment. The diameters of the cylinders are: high pressure, 45 inches, and low pressure, 78 inches, as in the original design, but the stroke of the pistons has been increased to 57 inches. The pistons are cast of composition, so as to combine lightness with strength, and are fitted with double cast-iron packing rings set out by steel springs. Each piston has one steel piston rod, 7½ inches in diameter, secured in a steel cross head, which is connected by two links, 20 inches long, to the working beam, the journals of the links being 7½ inches in diameter by 8 inches long.

The following are the principal dimensions and proportions of the boilers: Diameter of boilers, 9 feet; length of double-end boilers, from outside to outside of tube sheets, 24 feet 8 inches; length of single end boilers, 11 feet 10 inches; each tube sheet drilled for 192 iron tubes of 3¼ inches outside diameter; length of tubes, 8 feet 10½ inches over all; length of grates, 7 feet, width of same, 8 feet; total grate surface, 672 square feet. There are two vertical superheating steam drums, placed at the base of the smoke stacks. These drums are 8 feet 3 inches in diameter, and 9 feet high. Each drum is traversed by ten 16-inch iron flues. The chimney gases pass through these flues and through an annular uptake around the drum. There are two fixed smoke pipes, 8 feet in diameter and 60 feet high above the level of the grates. Total area of water-heating surface, 19,950 square feet; total area of superheating surface, 1,356 square feet; ratio of grate to total heating surface, 1:30; ratio of calorimeter through tubes, 6:1; capacity of total steam room in boilers, drums, pipes, and high pressure steam chests, 3,282 cubic feet; capacity of total steam room in boilers, pipes and high pressure steam chests, when drums are shut off, 2,552 cubic feet. The boilers and steam drums are constructed of steel.

As the drums are located above the armored deck, the steam pipes and valves in the boiler rooms are so arranged that steam will not be admitted to the drums, but pass from the boilers directly to the engines, when the vessel goes into action. —Mechanical Engineer.

AMERICAN SHIPPING.

WASHINGTON, D. C., December 14.

Special Correspondence of the Marine Record.

The report of Mr. Jarvis Patten, commissioner of navigation, is exceedingly interesting and contains some important suggestions. In comparing the status of American shipping with that of other maritime countries he says: "Though we may have developed in other ways we have not kept pace on the sea with the early promise of our national youth. The complaints, however, are not true that our shipping is going to ruin, as the fact appears that our mercantile navy stands second among the nations of the world and still forms one of the elements of our greatness." The total number of vessels employed in the Atlantic and Pacific coasts, including the western rivers and all inland navigation, excepting the northern lakes, on June 30, 1885, was 19,123, and their tonnage 2,455,720. Of this number 13,862 were sailing vessels, 4,111 steam vessels, 256 canal boats, and 894 barges. The total number of vessels engaged in the coastwise trade, excluding those engaged in the fisheries and upon the northern lakes and western rivers, is 15,918 and their tonnage 2,001,917.

Commissioner Patten gives figures to show that our coasting trade is by far the most flourishing branch of the United States merchant marine, and says: "If we include our lake and river tonnage it is the most formidable coasting fleet in the world, surpassing in tonnage the combined mercantile navies of any two nations, excluding Great Britain. Moreover, this fleet of coasters of various kinds, built for conducting the traffic of our extended coasts and long rivers is admirably adapted to the diversified variety of business it was constructed to perform. It is in point of equipment and efficiency of the vessels and accommodation and comfort for those on board second to no fleet in the world." The commissioner says that the relief afforded to American shipping through the operation of the shipping act of June 30, 1884, is already felt in our favor, but our expectations of a permanent revival must be delayed until a reaction comes with a demand for more tonnage.

He thinks that everything should be done to encourage American iron ship builders and the practice adopted in France and other nations of granting bounties on shipbuilding in order to give their vessels an equal standing as to price is commended. On the subject of pilotage the commissioner remarks that the time has arrived for Congress to take charge of the whole question of pilotage in the interest of the pilots themselves and of others concerned. The system of pilotage varies in many of the states and the rates are high in nearly all. These are shown to be oppressive to the ship owner, and to demand the introduction of a system that shall operate alike throughout the union. The local taxation of shipping in the various states is also dealt with, and it is suggested that shipping constitutes a class of property which differs from landed property, and it not altogether exempted from taxation should only be partially taxed. In no case, says the commissioner, should the tax be unjust to the American shipowner, who has to bear the double burden of decrease in the value of his property and competition with the foreign ship owner.

Under the head of collisions, the commissioner discusses at length the different plans for double side, lights, but advises caution in any change of the present system, which, he says, should not be ventured on until the new system to replace it has become familiar to maritime people and is found to be acceptable to commercial nations generally.

The extension to river steamers of the limited liability section of the act of June 26, 1884, is strongly urged.

ST. LOUIS.

St. Louis, December 14.

Special Correspondence of the Marine Record.

Navigation is temporarily suspended at this point, not that the river is closed, but the recent cold spell sent the water down so fast that there is no water to get out to Cairo on.

The steamer White Eagle, of the Keokuk trade, is aground on the "chain," above here some eight miles, and all efforts to get her off have failed so far, and likely she will have to wait for a rise.

The Anchor Line have just lost by fire the City Bayou Sara, a magnificent side wheeler, and less than two weeks later the city harbor boat Elou G. Smith, was partly consumed by fire.

Business has been looking up somewhat, the winter's supply of sugar beginning to come in.

Jenkins & Sass have started their famous Missouri river boat to Vicksburg.

The Engineer's Association here will send two representatives to the national convention in Buffalo. They will start January 10. J. H. H.

NATIONAL MARINE ENGINEERS' BENEFICIAL ASSOCIATION.

OFFICE NATIONAL PRESIDENT.

CHICAGO, ILL., December 8th, 1885.

To Subordinate Association in Unity and Friendship.—Greeting:

In accordance with custom, I do hereby direct the National Association to meet in its eleventh annual session, in Buffalo, N. Y., Tuesday, January 12th, 1886, at 12 m. It is therefore desired that this Association make unusual efforts to be represented, because the question of petitioning Congress to refund the money accruing from the excessive tax that was paid for license between 1869 and 1882, will be acted upon, and as it is a question in which we are all financially interested it is essential that a full representation be had. The law governing representatives allows each Association one representative, and two representatives if they have over sixty members. If an Association has under 50 members, it can be represented by proxy, provided that no proxy votes be allowed, excepting on resolutions presented by the Secretary of said Association not represented, and under the seal of the Association, in which case the National Secretary will be allowed to record votes in the affirmative on said resolution the same as if represented. Journal, 1885, page 342. Associations entitled to two representatives, are entitled to two votes. An Association with over 50 members, can not be represented by proxy. For law in full regarding representation, see Journal of 1880, page 5; of 1881, page 27; 1884, page 24; 1885, page 342. Associations entitled to proxy representation, and desiring it, will be governed by the above. All representatives will report at the Mansion House, in Buffalo, where ample arrangements have been made for their entertainment at reduced rates. The National Secretary will furnish you blanks for your annual reports, also credentials for representatives, to those Association desiring them.

Attention is called to exhibit No. 45, page 343, Journal of proceedings for 1885, and recording secretaries will act in accordance therewith. Each corresponding secretary will, upon receipt of this order, forward immediately a copy of the by-laws of his association to the National Secretary.

The per capita tax for 1886, is 35 cents, and must be paid in advance. Associations that do not send a representative, will send their report and post office order for the per capita tax to the National Secretary, Mansion House, Buffalo, N. Y. District deputies will send their annual report to the National President, 261 Milwaukee Ave., Chicago, Ill., on or before December 15th, 1885.

It is to be hoped that the several standing committees will, if they are unable to be present, send their report to the National Secretary, Mansion House, Buffalo, N. Y., and I need not urge upon the several standing committees the necessity of making their reports as concise and complete as possible.

All officers of the National Association or members of standing committees, having received any official communication that will be of public interest, will forward the same to the National Secretary, to be placed in the hands of the committee on correspondence, for analysis and publication.

ANDREW RITTER National President.

JAMES HENRY HARRIS National Secretary.

HOLIDAY RATES ON THE BEE LINE.

The management of the Bee Line, desiring to add to the general mirth and pleasure of the holidays, takes pleasure in announcing to the public that reduced rate tickets will be sold between all stations on the respective divisions of the Cleveland, Columbus, Cincinnati & Indianapolis Ry.—Indianapolis & St. Louis Ry.—and Dayton & Union R.R.—at two cents per mile for distance traveled,—no excursion rates, however, of less than 40 cents will be made. Tickets will be sold December 24, 25 and 31, 1885, and January 1, 1886, and good to return till January 2, 1886, inclusive. Children between the ages of five and twelve years will be sold tickets at one-half the above named rates.

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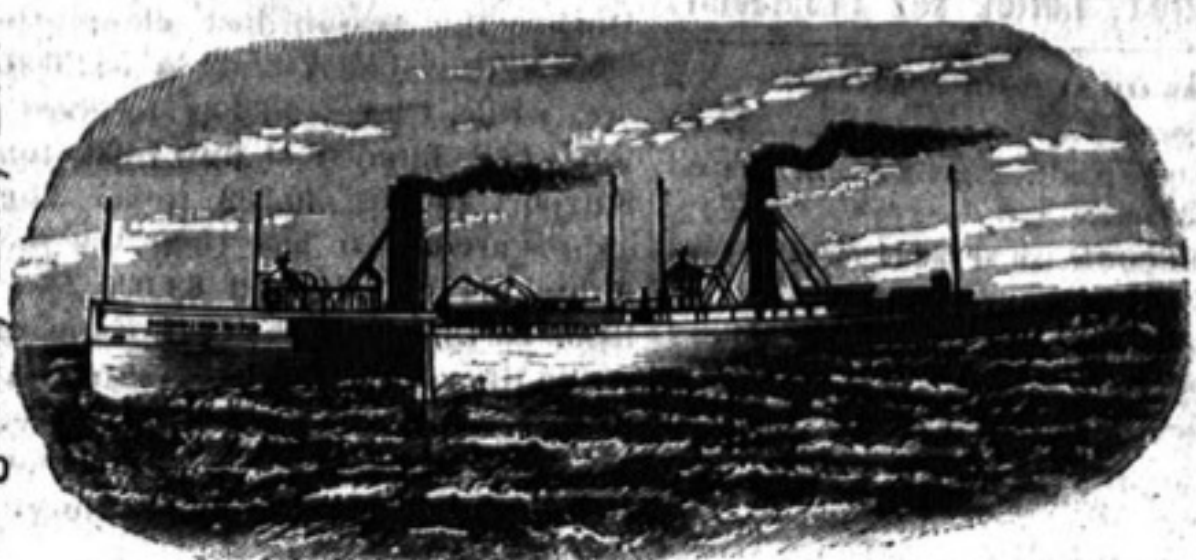
Marine Record.

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Commencing Sunday, Nov. 29 1885, at 12 o'clock noon the times given in the figures below is the new standard (Nineteenth meridian) time, which is thirty-three minutes slower than Cleveland time proper.

Eastward.	Arrive	Depart.
No 4, Fast Limited Express.....	12 55 A M	1 05 A M
No 8, N. Y. B & A. Express.....	12 25 A M	1 35 A M
No 26, Elyria Accommodation.....	12 45 A M	1 55 A M
No 24, Buffalo Ac'm via Sandusky.....	10 30 A M	11 50 A M
No 24, Toledo Accom via Newark.....	10 30 A M	11 50 A M
No 12, N. Y. & B. Fast Express.....	2 10 P M	2 45 P M
No 14, Special New York Ex.....	3 00 P M	3 00 P M
No 22, Night Ex via Newark.....	9 40 P M	11 00 P M
No 22, Night Ex via Sandusky.....	9 40 P M	11 00 P M
No 26, Connect Accommodation.....	12 25 P M	1 35 P M
Westward.	Arrive	Depart.
No 1, Fast Limited Express.....	12 15 A M	12 25 A M
No 26, Mich Express via Sandusky.....	12 15 A M	1 25 A M
No 3, Chicago Express via.....	12 40 A M	1 50 A M
No 26, Mich Accom Newark.....	12 40 A M	1 50 A M
No 21, Toledo Ex via Newark.....	11 50 A M	12 30 A M
No 5, St. Louis Ex via Sandusky.....	11 50 A M	12 30 A M
No 9, Chi Pac Ex via Newark.....	11 50 A M	12 30 A M
No 31, Elyria ac to Elyria only.....	6 15 P M	6 40 P M
No 27, Connect Accommodation.....	12 10 A M	1 20 A M

Sunday train for Nottingham—Depart 8:15 a. m. and 1:45 p. m.; returning, leave Nottingham at 8:50 a. m. and 3:45 p. m.

Reference made to Daily, & daily, except Sunday, & daily, except Monday.

A local Cleve and New York sleeper daily on No. 12, leaving Cleveland at 2:45 p. m.; arrive Grand Central depot, New York, 10:30 a. m.

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Following is the time in effect June 28, 1885, and until further notice:

EASTWARD.	Arrive	Depart.
Buffalo Accommodation.....	10 40 A M	10 45 A M
Chicago Accommodation.....	10 40 A M	10 45 A M
Local Freight.....	11 45 A M	12 15 P M
WESTWARD.	Arrive	Depart.
Chicago Accommodation.....	11 45 A M	12 15 P M
Fosteria Accommodation.....	12 45 P M	1 45 P M
Local Freight.....	12 20 P M	12 50 P M

ROCKY RIVER ACCOMMODATION. Depart—7:45 a. m., 1:35 p. m.

EUGLID ACCOMMODATION. Depart—6:24 a. m., 9:10 a. m., 5:05 p. m.

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A. A. POMEROY, Editor and Proprietor.

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The MARINE RECORD can be found for sale by the following news dealers:

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Articles, letters and queries on all subjects are solicited.

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Entered at the Post Office at Cleveland as second-class mail matter.

CLEVELAND, OHIO, THURSDAY, DECEMBER 17.

CLOSE OF LIFE SAVING STATIONS.

All life saving stations on the lakes have been closed and crews, who have stood at their posts and braved the dangers of wind and wave, must seek other employment for the winter. While the men employed in life saving stations are paid for the service they render, the pay is not sufficiently large to enable them to live in idleness through a long winter, even if their salary be ever so carefully hoarded, therefore the custom of retiring them for the winter when almost every position in the mechanical world has been filled, savors somewhat of injustice. The service is one of the best institutions of a paternal country. The report and of Superintendent Kimball for the fiscal year ended July 30, shows the efficiency of the management and crews through the entire coast line and along the lakes and rivers and is summarized as embracing 203 stations, 157 being on the Atlantic, 38 on the lakes, 7 on the Pacific, and one at the falls of the Ohio, Louisville, Ky. The number of disasters to documented vessels within the field of station operations during the year was 256. There were on board the vessels 2,206 persons, of whom 2,196 were saved and only 10 lost. The number of shipwrecked persons who received succor at the stations was 58, to whom 1,636 days relief in the aggregate was afforded. The estimated value of the vessels involved in these disasters was \$3,519,550, and that of the cargoes \$1,084,905, making the total value of property imperiled \$4,604,455. Of this amount \$3,352,760 was saved, and \$1,251,695 lost. The report gives full and specific accounts of all the circumstances connected with the loss of life.

The number of vessels totally lost was 156. In addition to the foregoing there were during the year 115 casualties to smaller craft, such as sail boats, row boats, etc., on which were 233 persons, 232 of whom were saved and one lost. The property involved in these instances is estimated at \$29,925, of which \$26,823 was saved and \$3,102 lost. In addition to the work of helping wrecked vessels, there were also 204 instances where vessels running in to danger of stranding in the night were warned off by the signals of the patrols of the life saving stations. The following table gives a summary of the statistics of the service from the introduction of the present system in 1871 to the close of the fiscal year. The loss of life stated below includes 183 lost and the wrecks of the Huron and the Metropolis which were really not chargeable to the service:

Total number of disasters.....	2,918
Total value of property involved.....	\$51,768,694
Total value of property saved.....	36,277,929
Total value of property lost.....	15,485,765
Total number of persons involved.....	25,693
Total number of persons saved.....	25,286
Total number of persons lost.....	407

This showing will convince all of the value of the system of the life saving service and lead the government to listen with willing ears to recommendations for the establishment of additional stations, which we are now prepared to advocate, and name Ashtabula Harbor as a proper place for the construction of one as speedily as possible. The importance of Ashtabula Harbor to commerce is generally recognized on the lakes. Receipts and shipments at that port are growing fast with the recurrence of each season, much shipping and many sailors enter the port and danger of wreck and loss of life are more imminent there than at any

ports which rejoice in the public institution that has conferred so many benefits on the mariner, the life saving station. In sustaining this statement it is only necessary to cite the one item of ore, and make the one comparison with other ports under the operation of the life saving system. During the season just closed there has been received at Ashtabula 582,000 tons of ore, while Cleveland has received 589,284 tons, (a difference of but 7,284 tons,) and Fairport of but 40,332 tons. The above figures are 68,000 less than the receipts at Ashtabula in 1884 and 88,000 less than in 1883. In 1871, the first year of the operation of the life saving service Ashtabula did not show receipts of a single ton of ore. Let a paper be drawn addressed to the proper officers and it will doubtless meet with a satisfactory hearing.

A NEW DEPARTURE.

Much significance attaches to the departure of one of Cleveland's most enterprising vessel owners, in his recent contract with the Globe Iron Shipbuilding Company. We have known for some weeks that Captain Thomas Wilson has had in contemplation the building of an iron or steel steamer to go into his Lake Superior trade, but the details and material were not decided on until last Saturday. The new steamer will be constructed of steel and the dimensions will be 284 feet over all, 250 feet between perpendiculars, 38 feet beam, and 24 feet depth of hold. The plates, of steel, will be of the same thickness as those employed in the construction of the Devereux, after which model she will be largely built. A feature regarding the new steel boat is that she is intended to carry four masts. It has been demonstrated that a fourth spar on a steamship is much the same as a fifth wheel on a wagon, a continual expense without adequate return, in other words, a useless appendage, and we are not prepared to commend the wisdom of the idea that led to this decision or change in the present custom of using but three spars as auxiliary to steamboats. In fact it is believed that the new iron steamer to be built by M. M. Drake at the Union shipyard, Buffalo, will carry but two spars.

Captain Wilson, who has placed the contract with the Globe Shipbuilding Company, for this steel boat is, to a certain extent, wedded to wooden boats, and it is significant that this departure has been made, and is a positive triumph for metal built boats, as one may infer that the manager of the Wilson line has watched closely the career of the Globe built boats on the lakes, and has been convinced that they have merit for carrying capacity, speed and staunchness. We are prepared to say that Captain Wilson's new steel steamer will give even better results than any boat yet built by the Globe, inasmuch as it will have more power and therefore be better adapted to make time. The fact also that the two new steamers to be built this winter for the same line, to be run under the same management, and of near the same tonnage, will furnish an occasion for comparison which will be valuable to note and abide by in the construction of lake craft. The Globe people, in the construction of the Onoko, took an advanced position which lake vessel owners will soon grow up to, and in building the Wm. Chisholm and J. H. Devereux have demonstrated their belief in the future of the iron boat on the lakes, their dimensions being nearer the ordinary requirements of lake commerce.

ONE of the strong points made in the recent discussion regarding the respective merits of military and civil engineers was "That our entire coast front from Portland to Texas is in a state of dilapidation as far as relates to military defense, that we are open for any enemy to attack us, on ocean or lake, but fortunately the old world knows little about us," and that "We have only about one hundred and twenty-five military engineers, and of this number only sixty have the necessary age and experience." If it is true that the old world knows little about the United States we need have no fear of attack at any quarter, and the more the world learns regarding us the less fear we need have. We do not insist that we have a sufficient number of engineers, but for all practical purposes of public improvements on rivers and harbors, unless Congress passes an appropriation bill for improvements on rivers and harbors, including sea coast betterments, we have more than the necessary quota of engineers to apply the available funds judiciously.

THE Toledo council has appointed C. A. King, A. L. Backus, M. J. Eurlight, M. D. Carrington and John Kumler, a committee to go to Washington and see about the

straight channel appropriation. It is to be hoped their mission will be one of profit to Toledo.

THE three new steamers building at Detroit by the Detroit Drydock Company, the City of Cleveland, the steamer for the Inter-Ocean Transportation Company, and the vessel for Peck and others, are to have the "Providence" capstan windlasses from the American Ship Windlass Company, with patent iron slide bits, gyp ends, power capstan, Grater's patent friction locking gear, and all the very latest improvements.

THE INSURANCE PROBLEM.

BUFFALO, December 15.

Special Correspondence to the Marine Record.

Navigation for the season of 1885 is over, and the losses in vessels and cargoes during the season foot up quite a large sum, which doubtless is felt by the various insurance companies doing business on the lakes. In marine circles it is rumored that many are about to withdraw from the lake business. If such is the case it is quite evident the returns are not satisfactory. If we could but find the real cause and be able to put it into figures your readers would be astonished beyond measure. No one has the slightest idea what it has cost to have carried us through and up to this date in the matter of marine insurance on the lakes. No branch of business is conducted with so much unfairness to both the insured and the insurer. If an owner insures his vessel in a good company for the season he does it with an impression that he has got to guard against some sharp practice that might be played on him if, by accident, he has to call on the company to make good their contract with him. He is thereby made dishonest by custom, sealed by contract, and a rogue for self-protection. This is the position of an owner insuring his floating property on the lakes to-day, a condition of affairs to be deplored, to say the least.

On the other hand there is much to be said in favor of protecting the insurance companies. These companies have formulated rules for classification and valuation, and in their policies have inserted clauses innumerable, all for their better protection, leaving but little to be added; yet they persist in a practice of inspection and valuation which is killing them by inches, and if continued long enough, will not leave an insurance company that will ever want to hear of the lakes. The mode of inspection is crude and unfair to all parties in interest. It is no inspection in fact. It is a sham and pretense in a large majority of cases. For instance, let us see how inspection is made. About the time they begin to make inspection, during January and February, vessels are all distributed around the lakes. The principal bulk of the tonnage is to be found in Buffalo, Cleveland, Detroit, Chicago, and Milwaukee.

Inspectors are appointed, with certain territory set apart to each inspector to operate in, and report in accordance with the blank forms, given him by the board of marine underwriters for the western waters, to fill in, and in answer to certain questions in printed form on the blanks furnished him. The inspector goes on board a vessel and finds her in winter quarters, covered with snow, and possibly one or two feet of snow and ice in the hold, devoid of any outfit whatever, save anchors and chains, and only a small portion of them in sight; her sail may be a mile away from her or more. Under such conditions can any person say that an inspector can make an impartial, honest and intelligent survey? It is not in the nature of things to do so. Who is the sufferer likely to be? The object of the survey should be to protect both parties in interest. The survey is made at the instance of the insurance company, but in such cases they are as liable to be misled as the owner of the vessel.

I have endeavored to show that the vessels composing the lake marine to-day are of a very superior class to what they were ten years ago. I may say in various ways. First, they as a larger class are more profitable. Second, they are constructed on more enduring principles, but the proportions for strength being no more, compared with capacity in increased tonnage. The superiority partly consists in being propelled by steam to a great degree. The models are not asymmetrical, nor do they possess beauty. The dimensions are not, as a rule, proportionate. They are unwieldy and laborious at sea. They are strong, but all principles are sacrificed to capacity. Still, the march of improvement is plainly visible, so far as profit is concerned, and for the time all interests are reconciled. But the day will come when another view will be taken, and we see the dawn of it to-day.

I have said that there is a class yet in ex-

istence which is not desirable. But they are here, and what will you do with them? I will suggest a remedy. Make a pool of them, pay for them in some way, and burn them, then the residue, as an insurance risk, will pay you. They will, by their disappearance, remove an inducement to small capitalists to invest in unprofitable property. Such property is of the past and not of to-day. The march of improvement has shown it to be an investment to be avoided. It is against all law or reason to persuade a man to throw away his property, though it may be, as a rule, a benefit at large. No man will believe it, more especially those directly interested.

Let us see how many years it will take to wipe out all such doubtful risks, even at increased premiums, reduced classes and valuations. The past season has cost the underwriters, in actual losses, a total of \$1,250,876; partial losses, something over \$400,000. Now, if we deduct premiums from the above the balance in two years should pay for all the objectionable risks. W. B.

NOTICE.

Miss Susan Roth, of East Bloomfield, N. Y., is anxious to know the whereabouts of her brother, John Roth, sailor, who has not been heard from for over two years. Age 30 years, five feet six inches high, and weighed about 180 lbs. light brown hair, gray eyes, light moustache.

Any information sent to the above address or to, J. A. BARNET, 144 Newberry Ave., Chicago, will be thankfully received.

The News says: Captain Spaulding who went down to the scene of the Quebec wreck on Thursday reports that the boat is in a bay and that she is out of water from the promenade deck. They are engaged in boarding up the gangways and as soon as that is done she will be pumped out and gradually brought up nearer towards shore until the pumps can be put on the lower deck. She will then be pumped out and taken below and if good weather continues she will be in drydock before navigation closes. As it is she is in a position in which she will not be specially injured during the winter. The captain says she is about as bad a looking specimen of a wreck as can well be found.

Captain Anderson, of the U. P. R. steamer Alberta, brought down three photographic views of the wreck of the Algoma, taken from three different points of view. The pictures exhibited a state of facts that seemed hardly possible considering the strength and size of the wrecked boat.

[Around the Lakes Continued from 1st Page.]

EAST SAGINAW.

Special to the Marine Record.

Captain Peter Edgar and family, of the schooner T. H. Cahoon, have decided to make East Saginaw their home this winter, having rented their property in Cleveland.

John Edgar, formerly mate of the schooner T. H. Cahoon, has been promoted to mate of the steam barge Porter Chamberlain for the season of 1886.

Captain H. Robertson will pull the bells on the propeller Porter Chamberlain next season, with "Billy" Stone at the throttle, and with the new compound engine now being made at Hodge & Co.'s, Detroit, they expect to make warm work for some of their rivals.

A. C. McLean, the vessel owner and agent left for a two weeks business tour through the east on Monday.

Captain "Mose" Rogers, of the Ida Cornling, is putting in his spare time clearing up his farm in "our big bayou."

The ferry boat Mary Bell is still in commission, running in connection with the Saginaw Railway Company.

Captain Fletcher's burned barge Isoco is being converted into a lighter, and when completed will make the largest on the river.

The steamer J. C. Lickin, recently put high and dry ashore at Sebawaing will be launched in the spring.

Captain John N. Stewart, of the barge Mary Brockhead, will winter at Marine City.

Captain Harry May, master of the barge Frankfort, has gone to Baltimore, Md., where he will spend the winter in the coasting trade.

It will be remembered that the propeller C. H. Green and consort Mattie C. Bell and Rosa Sonsmith, of the M. Line, owned in this city and which were bound for Chicago with coal and returned to Port Huron from Sand Beach, are to lay up for the winter. The officers and crew, most of whom reside in this city, arrived home last Wednesday. They were serenaded by a brass band, and an elegant supper was served at the Anchor house, of which Captain Charley Sonsmith is owner, and a good time had generally. They all express themselves as perfectly well satisfied at being home again. SHAW.

DETROIT.

Special to the Marine Record.

Dec. 15.—Although extreme cold prevails just at this writing the passage between Detroit and the opposite shore is not encumbered so as to prevent the Detroit and Belle Isle ferry steamers from making their regular trips. There have been occasions when the mammoth railway steamers have been impeded in their progress sufficient to bring them to a standstill, when they have invariably been released by the ferry steamers, which are of far less dimensions, and in this way the services of the latter have proved of great importance on the opening and closing of each season of navigation. But a few days since the propeller City of New Baltimore was here, anxious to return to Marine City to go into winter quarters, but this she could not effect, as Lake St. Clair was covered with ice some ten inches in thickness. Notwithstanding this impediment, relief must be had, and it was quickly carried out. The ferry steamer Excelsior knew how to do it, and started out with as much as to say "follow me." The Baltimore traveled in her wake and thus reached her home port. This service was rendered some days since as above noted; meanwhile the ice has become more formidable, and of course much thicker, yet another important duty was at hand for the Excelsior to perform, which was taken in hand yesterday. The steamship Chauncey Hurlbut had just discharged a cargo of grain at Sarnia, and was desirous of returning here to winter. She is a large and powerful steamer, but not adapted to travel through or over ice barriers. She arrived at Marine City and there advised her owners at Detroit she could go no farther. She soon found a companion which was no less than the powerful tug Winslow, just on her return from Saginaw Bay, where she had been rendering a humane act in rescuing the crew and passengers of the wrecked propeller Oconto at the Charlities. The Excelsior started out again yesterday on her mission of mercy, as it were, to enable the detained boats to reach their home port once more. The foregoing needs no comment, yet are facts well worthy of record.

Who is there of our lake men, more especially of the olden time, who did not know Captain James Carney, a lake navigator of upward of thirty years, and now no more? Captain Carney crossed the dark river on Saturday, the 12th inst., quite suddenly. He took a walk out shortly after breakfast, and on returning soon afterward dropped dead, of supposed heart disease; aged 65 years. He was one of the most experienced pilots on the lakes. In 1852 he was second mate of the ill-fated steamer Atlantic which was sunk near Long Point by collision with the propeller Ogdensburg, which accident carried to a watery grave one hundred and fifty lives. The only survivors of the Atlantic crew are Captain C. Blodgett, of this city, A. Burgess, the cook, and a Mr. Canfield. Captain Robert Richardson, who commanded the Ogdensburg, has also gone to his rest.

The steamship Ada Allen, schooners Persia, Arctic, British Lion and Keepsake are in winter quarters at Windsor.

The steamship S. J. Macey has just discharged a cargo of corn at Walkerville, and has gone into winter moorings here.

The history of the "Star Line of Steamers," for want of space, terminated somewhat briefly, otherwise abruptly. It is worthy of note, however, to state in extenso that as regards the steamer Idlewild's movements the largest number of fares collected on a single trip was 960 and the smallest 67. She performed during the season no less than 186 round trips, with an average of 20 stops, aggregating 3,760 calls and a variation of time of only 15 minutes, which is a better record than any railroad in the United States can show, and must be largely placed to the credit of Captain D. McLachlan, her very efficient commander. She averaged 60 tons of freight daily.

The steamer Milton D. Ward, of the same line, made 130 round trips, and carried during the season 37,000 passengers, averaging 20 stops each trip, and 20 tons of freight, and just here it may be noted that the Ward, being a morning boat, does not come in contact with nearly so much freight as the other steamer. The largest number of fares collected on a single trip was 1,000. The affable and genial Captain Wm. McKay, in the performance of his duties, is too well known to require praise at our hands.

The steamer Evening Star, Captain Chas. Smith, made 120 round trips between Detroit and Toledo, and carried during the season 15,000 people, and with only one exception, without accident or mishap, and here it may be added that Captain Smith was the right man in the right place.

By a paragraph in an exchange paper I

notice the reconstruction of a veteran craft at the shipyard of J. M. Kelley at Racine, Wis., which he has now in hand. The vessel referred to is the schooner Caledonia, which has gone through forty-three years service. She was built at Port Credit, Lake Ontario, in 1842, and is, beyond a doubt, the oldest craft on the northern lakes.

The propeller Oconto, which stranded at the Charlities, Saginaw Bay, during the recent storm, has been abandoned for the season. The tug Winslow made every possible effort for her release, but it was found impossible to approach near enough to accomplish that purpose, and it is barely possible that it will never be effected. The Winslow's visit, however, was timely, for the rescue of the passengers and crew. Such is the result of being too venturesome at a late period of the season's navigation, although these lessons are almost invariably ignored every fall, and the experiment attended with much loss of property and not unfrequently loss of life.

The steamship Keystone, with her consorts the barges Agnes and M. I. Wilcox, are among the belated craft of the season, all lumber laden, and delayed at Malden. They were destined to Toledo. The tug Hercules, of Mill's line, leaves here to-day to tow them to this port, the Keystone being somewhat disabled.

Candler Brothers' new pile driver, which was cut through by the ice in Lake St. Clair Monday and sunk off Gross Point, floated down the river early Wednesday morning, and when abreast of this city, about 5 o'clock was run into by the car-ferry, Lansdowne, breaking the Lansdowne's pillow block, and wrecking the driver, which drifted down the river. The Lansdowne is at the Detroit company dock repairing. The pile driver was new, built last spring at a cost of over \$7,000.

A dispatch was received here yesterday from Captain Wm. Lee, of the tug Admiral Porter, stating he had abandoned all efforts toward rescuing the schooner A. C. Maxwell, ashore near Goderich, and as soon as the weather would permit the tug would return to Port Huron there to retire for the season. It is more than probable that this will terminate the career of the unfortunate craft, with the ultimate loss of her cargo of ore. The Maxwell was built at Bay City in 1879, and is 469 tons burden.

HALL.

ST. JOSEPH.

The life saving crew succeeded Monday forenoon in rescuing the crew, consisting of seven men, from the schooner Lucinda Van Valkenburg, which was lying off this place in distress. The Van Valkenburg left Muskegon Friday forenoon for Chicago, and was out in the gale which prevailed during Friday and Saturday. When off Racine she lost her rudder and drifted to the east shore, where she arrived early Monday morning. To save her from beaching she dropped her anchor, but lost her jibboom, jibs, topmast, and part of her rigging. She is covered with ice to her cross-trees. The ice is two to three feet deep on her deck. She shipped a deck load of lumber even with her rail. Owing to the amount of ice the life saving crew were unable to release her, and have sent to Chicago for a tug. The men were nearly frozen when rescued.

MANITOWOC.

G. S. Rand, the Manitowoc shipbuilder, died of paralysis on the 8th. Mr. Rand was in his early life a sailor, but for twenty-five years has been engaged in shipbuilding at Manitowoc, and for the last fourteen years was the senior member of the firm of Rand & Burger. He has probably built as many vessels as any other man on the lakes. He was the superintendent of construction for the Goodrich Transportation Company up to the time of his death, and built all the boats now in their line. He was about 55 years of age, and leaves a wife.

KINGSTON.

The News says business in the Deseronto shipyard promises to be quite brisk this winter. The Quinte will be largely rebuilt and improved. The Gipsy will be fitted with new paddle wheels and other changes will be made so as to give her increased speed. The Puritan will be metamorphosed and the Nile and Armena will be completely overhauled.

Captain John Donnelly & Sons resumed operation, on the schooner Bolivia, which was sunk near Knapp's point, last Thursday afternoon. Friday morning they had the vessel afloat and on her way to Garden Island. At the island a diver examined the vessel's bottom and found several leakages, which he patched up. The deck is sprung considerably by the corn which swelled. The schooner left for Ogdensburg in tow of the steamer Chieftain, having on board two steam pumps. The schooner Elgin was also taken to Ogdensburg with the lighterage from the Bolivia.

BAY CITY.

Special to the Marine Record.

Captain Glass, of the barge Senator Blood, was up from Bay City this morning, and gave the writer a graphic sketch of the big blow of last week, in which his boat had the full benefit of the storm from its start on Friday evening until the waves finally lulled to a more peaceful mood on Sunday night. He states that they left Bay City about 1 o'clock Friday afternoon with about 298,000 feet of lumber, mostly from Pitts & Cranage's mill for Cleveland parties. Towards 4 o'clock the wind began to rise, and the outlook for a smooth passage was decidedly bad. As darkness came on the wind increased until by 6 o'clock it was blowing a gale. The steamship M. Sicken was towing the schooner Zach Chandler and the Senator Blood and at 7 o'clock, finding she was making no headway, she let go both anchors, which example was followed by the Chandler. Word was passed to Captain Glass not to let go his anchor, as they would hold him all right. He considered the matter, however, and at the end of half an hour thought it best to do so, and it was fortunate that was his decision, for an hour after the sleet and snow blew so fiercely in the faces of the crew they could not have managed it anyway. The waves came rolling in like moving mountains and the Blood kept continually shipping large quantities of water which poured in the forward part of the vessel in such a manner that it accumulated there, and having become in a leaking condition the situation was, to say the least, very hazardous. The pump in the after part of the barge was useless as she inclined so much forward the water all ran there. One pump was insufficient to keep her clear and the captain then threw enough lumber off to have her on an even keel. The men worked in the blinding storm from 8 p. m. to 12 p. m. before they succeeded in getting enough lumber off to attain their object. By day light all immediate danger was over, but the wheel of the steamship Sicken was found to be disabled and badly iced over, so it was decided to return to Bay City. The Sicken after procuring more coal left for Cleveland with the Chandler. They got as far as Marine City and, report says, went on to the St. Clair flats, but were obliged to return, and are now laid up at Marine City, being unable to proceed. Captain Glass says he has had thirty years' experience on the lakes but he never remembers to have been out in a worse storm and feels grateful that he and his crew are now safe on terra firma.

Beebe & Co's. dredges, have secured a large job from the M. C. railroad at East Saginaw, and are now at work on the same.

Captain Fred Barclay of the tug Maytham is putting in the winter collecting rents for the Barclay estate.

Work on the new barges at Wheeler & Crane's shipyard is progressing favorably.

A new hull for the tug Standard is to be built at Wheeler's yard before long.

Captain Riley Burlington is again introducing his favorite game called pig.

A foot of snow fell here Saturday night and sleighing is excellent.

The tug Tom Maytham is to receive new legs for her boiler and a new stack during the winter.

The loss on the McGraw mill which recently burned is \$150,000 with an insurance of \$100,000. It gave employment to 150 men and will undoubtedly be rebuilt, although there is some talk of removing it to Lake Superior in close proximity to the firm's pine land interest. SHAW.

FRANKFORT.

Special to the Marine Record.

The schooner Sea Gem lay wind bound here during the blizzard, sailed for Milwaukee Thursday morning 10th. On the same day tug D. P. Hall left for Charlevoix to tow the three masted scow Dan Mabey to this place, whence the steamship Geo. Burnham owned by the same company will tow her to Milwaukee. The scow was formerly the brigantine I. M. Hill, but has been rebuilt and name changed.

Steamship Geo. Burnham came in Tuesday with a load of supplies for Frankfort and has been weatherbound all the week.

Steamer Weston and Geo. D. Sanford are making regular trips to and fro between Manistee and Frankfort.

The fish tugs numbering six are still engaged in fishing and will continue to do so all winter if weather permits, and the light-house department would do well to keep the lights on the Manistee Island and Point Betsy lit this winter as these craft may need a beacon to guide them on a stormy winter night.

Tuga Jesse Slyfield and Cynthia have been laid up for the winter.

Snow about 15 inches deep; harbor or rather the upper end of this port, frozen over on the 6th, but the harbor proper is still open for navigation. BURMEISTER.

SANDUSKY.

Special to the Marine Record.

After a good deal of noisy confusion and wrangling with the winds that "blowed it up high" for several days, the mutterings of the waters of the bay gradually subsided and were finally and effectually "shut up" by the intervention of a third party by the name of Jack Frost, who, a few days since, assumed his severest aspect and came up this way, conquering and to conquer. The bridge across the bay is now about five inches in thickness; but this does not prevent the steamer American Eagle from making daily trips to the Islands, for she plows her way through the congealed liquid almost as easily as do her sister craft the water in its natural and more yielding state. This steamer was built expressly for such purpose (being iron clad), and has made the trip through ice, ranging from eighteen to twenty inches in thickness. This seems almost incredible, yet it is nevertheless a fact, and the novel sight of seeing the Eagle coming into port, weighted with freight and passengers, while heavily laden teams are crossing and re-crossing on the ice, is not an infrequent one.

The steamer City of Dresden cleared from Leamington last week, Wednesday, for this port, but owing to the ice in the lake was compelled to abandon the trip.

The steamer Louise took out a clearance here on the 8th inst., for Pelee Island.

The tug Annie Robinson, with a scow and three fishing smacks in tow, left port on Wednesday of last week for the purpose of recovering what remained of Lay Brothers' fish pounds, which had been exposed to the terrible storm of the week previous. On returning they were unable to gain an entrance to the bay on account of the ice, and made for Huron, reaching that place after a rough experience. It was blowing almost a gale at the time, and was bitter cold, the water splashing over her, congealing as fast as it struck the deck. The weather having moderated sufficiently to weaken the ice, the Robinson was since enabled to make this port with her tow.

The tug Record, which cleared here on the 8th inst., with the schooners Grace Amelia and Lyman Casey, coal laden for Windsor and St. Clair respectively, in tow, was unable to get her consorts to their destination on account of the ice, and returned to this port on the following Thursday, having left both vessels at Put-in-Bay. She left at noon of the same day for Cleveland to go into winter quarters. On her way in the Record picked up the barge B. B. Ishman, which had been towed up from Cleveland by the steamship Turner, that craft having gone on to Detroit with a cargo of coal.

The steamship Norma, which was so badly damaged by fire at this port on the night of the 9th ult., will be rebuilt this winter and be ready to go into commission when navigation opens in the spring. The portion of her upper works that was not destroyed has been removed, and the engine taken all apart for repairs.

Of Lake Erie ports Sandusky stands third in importance in the iron ore trade. The receipts of 1885 were 143,180 tons, being an increase over the previous year of 84½ per cent., and an increase over 1883 of 143½ per cent. On the 1st of December there were 87,457 tons on dock and unsold.

F. K.

PORT HURON.

The wrecking tug Winslow arrived here early Sunday morning with the passengers and captain of the steamer Idlewild, aground and frozen in near Charity Island. The tug was unable to get within three miles of the propeller on account of the ice. Two men were left on board with the horses and cattle. It is thought that the boat will go to pieces. An attempt will be made to take off the cargo on the ice. Most of the survivors left for their homes. The passenger and crew were being well cared for by the lighthouse keeper and fishermen, and were taken on board by the aid of small boats. The Oconto is in good condition, save her upper works, which plainly show the terrible storm she passed through on that memorable night. The mate says the boat is dry, and generally in good condition, as also is her heavy load of freight.

The schooner A. G. Ryan is ashore at Oak Point, in the river St. Lawrence. She was on her way to Gananoque from Trenton when she grounded.

MILWAUKEE.

Special to the Marine Record.

The two schooners Melvina and Eagle Wing passed Monday afternoon for Chicago. The Dan Maybee arrived with wood. The steamship C. H. Starke returned from Ludington, being unable to reach her dock on account of the ice. The Saginaw Valley ran back. The M. F. Butters and Sea Gem are awaiting the weather.

Navigation is closed at last and winter is upon us good and strong, with thermometer marking 10 degrees below zero. Between 90 and 100 sailing vessels and tow barges and about 30 steam barges have gone into winter quarters here, with a few still out and bound here and may they arrive safely.

Schooner Napoleon, without a man on board, broke adrift from her moorings during the storm last week and started on a voyage down the river. She took out the jibboom of the schooner Black Hawk and continued on her course, finally bringing up on the beach on Jones Island, fully six blocks from where she started. During her trip she carried away her jibboom and both top mast. She was pulled off the beach by the tug John Evenson and towed up the river to be rebuilt.

There is every prospect of plenty of work in the shipyards here this winter. Wolf & Davidson will build a steam barge for Pardee, Cook & Co. of Chicago of the following dimensions: 130 feet keel, 27 feet beam, 9 feet hold. She will be iron strapped and her frame will be bolted thoroughly in brine to remove the acid. Her cost is estimated at \$15,000.

The steam barge Minnesota of the I. O. T. Co.'s line will be docked and rebuilt to give her two feet more depth of hold and increase her carrying capacity from 1,100 to 1,400 tons. She will also have new upper decks, new houses and have her masts shifted. Her repairs will cost \$12,000.

The J. R. Whiting of the L. M. & L. S. Transportation line will be out in two and lengthened 35 feet. She will also have a steel arch 18x4 from stem to sternpost inside, an additional mast and between deck beams, at a cost of \$10,000.

The steamboat-schooner Penobscot will have new decks, foremast, rail and cabin at a cost of \$1,000. She only made seventy-one trips from this port to Muskegon and back with lumber this season and Captain Chas. Johnson thinks if he gets a new foremast and some other repairs this winter he can make seventy-eight trips next season. He has not missed or waited an hour on account of weather this season but has went out of this port in the teeth of the heaviest gales we have had, and has not lost a piece of lumber or torn a sail, and how is that for steamboat time. They call the Penobscot Charley Johnson's steamboat here and she deserves the name.

The above mentioned repairs, etc., are to be done by Wolf & Davidson and the prospects are that more will be added to the list at the present time. They had in dock last week the steam barge C. J. Kershaw for recalking inside and out, new rudder post, and a new piece of keel; steam barge Nellie Torrent for a new wheel and minor repairs and the steam barge Hattie P. Perene for some repairs to her stern bearings; the steam barge Progress was thoroughly overhauled.

At the Milwaukee Shipyard Co.'s yard they are building a steam barge for their own use or for sale. She will have a carrying capacity of 600,000 feet of lumber. They had in dock last week the steam barge Nabant for some repairs and her place was taken by the steam barge Marshal F. Buttrera, so you see it is looking well in the shipyards here this winter.

The Whale Club is about to be reorganized here this winter and will hold a meeting and elect officers some time next week. Captain Thompson of the Minnesota is mentioned as senior whale and Captain J. McArthur as junior whale. It is claimed that Captain Jamison, the Evangelist, is a member of the club. Captain Thompson is a hard race for a whale. It has been said that he never so much as S. B. Smith, W. L. Davidson's reliable book keeper to the office of grand lecturer to the whales. He has been an extensive trip throughout the lake with his fleet and is generally known that he can give some very thrilling accounts of cow-boys, prairie fires, how I did shoot buffaloes etc.; but more anon.

Q.

THE MARINE HOSPITAL SERVICE.

The annual report of the Surgeon General of the Marine Hospital Service shows that the hospital service has been up to September 1st, 1884, and up to September 1st, 1885, a total of 1,000 patients treated was established. The establishment of a hospital service, as is also the propriety of additional legislation governing the appointment of medical officers. The Surgeon General says it is a source of gratification that another year has passed without the introduction of an epidemic from any quarter or the development of any serious epidemic without the borders of the United States. Estimates are made for the maintenance of all the quarantine stations, and it is urged that specific appropriations be made for them. The disbursements from the epidemic fund during the fiscal year amounted to \$52,000. The establishment of a government quarantine at San Francisco is recommended.

HISTORY OF LAKE NAVIGATION.

BY J. W. HALL.

Written for the Marine Record.

CHAPTER XLIX.

In 1854 there were on the whole chain of lakes, 110 sidewheel steamers of 57,961 tons, 97 propellers of 33,732 tons, 83 barques of 12,839 tons, 101 brigs of 25,901 tons, 689 schooners of 97,641 tons, and 216 sloops and scows of 9,700 tons, making a total of 237,830 tons; total value, \$10,185,000. Prior to this period a large number of all classes of vessels had passed out of existence, as noted. Already the south and east of the chain of lakes were lined with railroads which were fast drawing the freight and passenger traffic from the lakes, and it was easy to foresee that the day was not far distant when the railroads, to a large extent, would have the supremacy. There are now but few side wheel steamers on the lakes in comparison to former times, while the class of vessels known as barques and brigs have almost entirely passed out, and are known only in history. Propellers, in the meantime, have largely increased and are doing the great bulk of freighting business on the lakes, being more admirably adapted for that service.

The total tonnage of Buffalo Creek district in 1854 was 65,042.87 tons, district of Presque Isle 9,085 tons, Cayahoga district 3,158.68 tons, Sandusky district 5,222.78 tons, Miami district 3,436 tons, Detroit district 52,363 tons, Chicago district 25,721.92 tons, Milwaukee district 11,645 tons, Oswegatchie district 4,209.87 tons, Mackinaw district 4,462.62 tons, Niagara district 868.32 tons, Genesee district 913.63 tons, Oswego district 24,611 tons, Cape Vincent district 5,148.46 tons, Sackett's Harbor district 1,816.79 tons.

By reason of the impassable condition of the St. Clair flats during the navigation of 1854 the following summary statement is given of the amount of losses sustained by vessel owners. The number of steamers engaged in the carrying trade of the upper lakes, and passing the St. Clair flats was 8, with a total of 6,880 tons, and the number of propellers 44 of 21,769 tons; total, 28,649 tons. These vessels paid for lighterage, damages by collision, and while aground on the flats, the sum of \$208,000. There were also sail vessels engaged in the same trade, 32 barques of 12,234 tons, 84 brigs of 21,759 tons, and 198 schooners of 48,333 tons; total, 82,314 tons. These vessels paid out during the season of 1854 for towing and lighterage, \$168,686.56. Time detained on the flats 5,566 days, \$220,640; damage for repairs by collision, etc., \$62,800; total sail damage, \$452,126.56; total steam damage \$208,000; grand total \$660,126.56.

Navigation commenced at Buffalo in 1854 April 2, the steamer Buckeye State, Captain Jacob Imson, the first to depart, and the straits of Mackinaw opened April 25, the brig Globe the first to pass through, bound west.

Appointments for the season were as follows:

Steamer Illinois, (new), Captain J. R. Howe, Detroit and the Sault.
Steamer Plymouth Rock, Captain George E. Willoughby, Buffalo and Detroit.
Steamer Western World, Captain C. C. Starnard, Buffalo and Detroit.
Steamer Ocean, Captain C. C. Blodgett, Detroit and Cleveland.
Steamer Myflower, Captain T. J. Hodson, Buffalo and Detroit.
Steamer North Star, Captain B. G. Sweet, Cleveland and the Sault.
Steamer Northerner, Captain John Stewart, Cleveland and the Sault.
Steamer Cleveland, Captain J. Robertson, half season, Detroit and Cleveland.
Steamer Dart, Captain W. H. Goodnow, Detroit and Toledo.
Steamer Canadian, Captain W. H. Smith, Detroit and Chatham.
Steamer Arrow, Captain J. W. Keith, Detroit and Toledo.
Steamer Bay City, Captain J. M. Lundy, Detroit and Sandusky.
Steamer T. Whitney, Captain Wm. Thorne, Detroit and Saginaw.
Steamer Forester, Captain J. B. Goodsell, Detroit and Port Huron.
Steamer Traveller, Captain Cooper, on Lake Michigan.
Steamer E. H. Collins, Captain H. J. Jones, Cleveland and the Sault.
Steamer Lady Elgin, Captain L. Chamberlain, Buffalo and Chicago.
Steamer Buckeye State, Captain P. J. Ralph and Imson, Cleveland and the Sault.
Steamer Islander, Captain Barrow, Detroit and the St. Clair.
Steamer Queen City, Captain Wilkins, Buffalo, and Detroit.
Steamer Huron, Captain Cottrell, Detroit and Saginaw.
Propeller Oriental, Captain H. Squier, Buffalo and Chicago.
Propeller Cleveland, Captain McHenry, Ogdensburg and Chicago.
Propeller Omar Pasha, Captain Watts, Buffalo and Detroit.
Propeller Vermont, Captain Cheesebrough, Ogdensburg line.
Propeller California, Captain J. Huff, Buffalo and Detroit.
Propeller Selota, Captain Roberts, Buffalo and Detroit.

Propeller Oregon, Captain Sabine, Buffalo and Detroit.
Propeller Northern Michigan, Captain R. Stringleman, Ogdensburg line.
Propeller Pangloss, Captain J. B. Beauregard, Buffalo and Detroit.
Barque Fame, Captain J. C. Robinson, Buffalo and Chicago.
Barque Nucleus, Captain Ed. Darley, Buffalo and Chicago.
Barque E. B. Morgan, Captain Hurlbut, Buffalo and Chicago.
Barque Roelison, Captain Randall, Detroit and Oswego.
Schooner Fortune, Captain Gordon Campbell, Buffalo and Chicago.
Schooner L. M. Mason, Captain A. S. Gotham, Buffalo and Chicago.

The other steamer appointments were given in a previous chapter.

There were 7 side wheel steamers commissioned on the lakes in 1854, the steamer Plymouth Rock, built at Buffalo, 1,991 tons; Western World built at Buffalo, 2,000 tons; North Star built at Cleveland, 1,108 tons; Illinois built at Detroit, 926 tons; R. R. Elliott, built at Newport, 321 tons; Banahoe built at Portsmouth, Lake Ontario, 400 tons, and the Union built at Sorel, Ontario, 527 tons. Also 13 screw steamers, as follows: Oriental 950 tons, Toledo 685 tons, Sun 629 tons, Omar Pasha 313 tons, Hamilton Morton 144 tons, Wm. Peck 172 tons, Little Eva 20 tons, all built at Buffalo; Mr. Vernon built at Huron, O., 577 tons; Plymouth 846 tons, Ottawa 300 tons, Robert N. Foss 260 tons, Dick Tinto 205 tons, all built at Cleveland, and the Genesee 128 tons, built at Rochester.

The steamer Sultana, 800 tons burden, was sold by the United States marshal at Buffalo to Mr. Thompson, of Cleveland, for \$9,200. She was then seventeen years old, and had been one of the favorite steamers on the lakes.

The Chicago harbor was dredged during the season to twelve feet, deep enough for the safe passage of any sail vessel not more than 800 tons, and for a steamer not more than 1,500 tons. The portion of the bar dredged was that which vessels, making an entrance to the river, would ordinarily take, commencing at a point northeast from the north pier and extending to a projection directly south of the south pier, there being a distance of some six hundred feet between the points, which placed it in better condition than for the past ten years.

The propeller Dayton, of the Oswego & Sandusky line, was sold at Buffalo to Latham & Tozer, a Quebec house, for \$23,000, to trade between the states and the colonies at sea.

The schooner H. L. Lansing made the passage from Buffalo to Detroit river in twenty-four hours, having upward of three hundred tons of freight on board.

The schooner Omar, laden with salt from Oswego, was wrecked at Cleveland and three lives lost.

The schooner R. R. Johnson, laden with wheat, foundered, with all hands, off Fairport. Captain Snell, who commanded her, was seen in the rigging by his wife on shore, waving his coat, but finally fell off in sight of home and friends and was drowned. The vessel was owned by Solomon Snell, brother of the captain.

The schooner Ontario, with two hundred tons of merchandise, was wrecked on Nicholas Island, Lake Ontario.

Judge Baldwin, of a Pennsylvania court, gave the following decision in relation to the duty of seamen: "The passenger stands in a position different from that of the officers and seamen; it is the sailor who must encounter the hardships and perils of the voyage. Nor can this relation be changed when the vessel is lost by tempest or other dangers of the sea and all on board have betaken themselves for safety to the small boats; for imminence from danger cannot absolve from duty. The sailor is bound, as before, to undergo whatever hazard is necessary to preserve the boat and the passengers. Should the emergency become so extreme as to call for the sacrifice of life there can be no reason why the law does not remain the same; the passengers not being bound either to labor or to incur the risk of life, cannot be bound to sacrifice his existence to preserve the sailor's."

"The captain, indeed, and a sufficient number of seamen to navigate the boat must be preserved, for, except these abide in the ship all will perish; but if there be more seamen than are necessary to manage the boat, the supernumerary sailors have no right for their safety to sacrifice the passengers."

During the year 1854 there arrived at Sheboygan 4,313 passengers and 2,705 tons of merchandise. The exports were, 39,203 bushels of wheat, 7,044 bushels of potatoes, 3,967 bushels of barley, 1,700 bushels of oats, 1,425 barrels of flour, 194 barrels of white fish, 641 m lumber, 484 m lath, 581 m shingles, and 121 m staves.

The population of Chicago in 1854 was 74,500.

The number of arrivals and clearances of American and foreign vessels, the same year was 8,972 of 3,995,284 tons; number of seamen, 120,838.

Forwarders not heretofore enumerated: Allen, Canfield & Co., Wm. Monteith, J. J. Talmadge, J. M. Griffith & Co., Holt, Palmer & Co., Willis D. Walbridge, Jas. C. Evans, H. S. Beecher, Buffalo; Roelfson, Hatch & Co., Pittman, Trowbridge & Jones, Roelfson, Collins & Vorce, Sylvester Larned, John B. Palmer, Chas. and Sebro Howard, Nickles, Whitcomb & Armstrong, Detroit; Isaacs & Co., J. M. Dygert & Co., W. Avery & Co., Oswego; Scott & Co., Toledo; Thos. Whitney, W. L. P. Little, Saginaw; Blackman & Eaton, Saginaw City; James Watson, Lower Saginaw.

The brig David Ferguson made the trip from Milwaukee to Buffalo and back in twenty-two days. She carried four hundred tons of freight down and brought back over that amount, being heavily loaded both ways.

The barkentine Sonora, built at the shipyard of Philo Ellenwood, at Sackett's Harbor, for Hooker & Hosworth, made her first appearance at Oswego to load for Chicago. She was 136 feet keel, 25 feet 8 inches in beam, and 12½ feet hold. She yet floats as a barge.

The schooner Peoria came out new this season. She was built at Black River for Livingston & Frink, and was designed for the upper lake trade.

A new vessel of fine model was also launched at Clayton, and named after that port. She was of 381 tons burden, and was built by John Oades. Holt & Co., owners.

The Autocrat, 345 tons, was built at Cattaraugus by Stevens for the W. T. Company; the Antelope, 290 tons, built at Port Robinson by Abbey for Edward Brown Hamilton; the Arab, 204 tons, built at Buffalo by Laveya for E. Morris; the Black Hawk, 384 tons, built at Ohio City by Stevens & Presley for Abell & Barney; the Berlin, 260 tons, built at Milan by Ruggles for Thomas Hamilton; the Cairo, 355 tons, built at Buffalo by G. S. Weeks for the W. T. Company; the Coleraine, 212 tons, built at Oswego by A. Miller for Kitts & Moore; the M. L. Collins, 801 tons, built at Toledo by C. Jenison for M. L. Collins; the brig J. G. Deshler, 378 tons, built at Cleveland by Quayle & Martin for Warner & Co.; the D. O. Dickenson, 384 tons, built at Milwaukee by J. M. Jones for Hooker & Nichols.

There were 384 disasters during the navigation of 1854 with a valuation of property lost amounting to \$2,187,825. One occurred in January, 46 in April, 25 in May, 11 in June, 14 in July, 21 in August, 58 in September, 61 in October, 88 in November, and 64 in December; total 384. There were also several of minor importance where the loss was under one hundred dollars which were omitted, and doubtless some which may have been overlooked. Eight sidewheel steamers, 6 propellers, 3 barques, 8 brigs and 30 schooners passed out of existence during the season.

Loss by steamboats \$463,400 by propellers \$650,100. Total loss by steam vessels \$1,113,500; total loss by sail vessels \$1,044,325. Value of loss in January \$10,000, April \$810,750, May \$217,000, June 40,700, July 59,050, August \$63,625, September \$129,700, October \$108,100, November \$456,000, December \$490,000. Number of lives lost during the season 119.

WOULD FRESHEN THE DEEP BLUE SEA.

See the young man. He is not quite so tall as his younger sister; but then he is much slimmer. His cheeks are ruddy as ripening peaches, but they are not quite so downy. He is raising a mustache. When he gets two more hairs sprouted on the right side and one more on the left he will have three altogether. He has been nearly five weeks out of school, and if he lives and keeps his health he will be 19 years old in the third year of Mr. Cleveland's first term. Is he an editor? He is a journalist. He is the man who writes all the funny jokes about married men, and how wives talk all night, and what a trial and expense a large family of grown up daughters is, and how many large bills a married man has to pay, and how he is always bald, and stays at the club every night, and always comes home drunk, and plays poker, and goes to the theatre with strange ladies and dodges his creditors.

Does that very young man write all those funny things? Yes, dear. It is because he is so very young that he writes them. Will he know more as he grows older? Perhaps; if he should live to be a couple of thousand years older he might know a little more. Is the young man fresh? Is he? If he should wade through the ocean, dear, the blue waters of the loud sounding sea could forever after be used for drinking purposes.

J. K. Smythe lost a box of silverware from the deck of the City of Duluth on recently. The box slipped into the river near the angle between Kemp's and Trempe's docks. On the following day diver Goodreau went down and brought it to the surface again. No special damage had been done to the ware.